

ATTACHMENT H: APPLICANT-PROPOSED MEASURES (APMS)

APM Number	APM Text
General	
APM-GEN-01	Native soil not used for backfill will be spread on site, if clean, or hauled off site and disposed of at an approved facility. Construction activities that involve placement of native, clean soil will be managed by employing BMPs that minimize soil erosion and impacts on surrounding vegetation per the SDG&E Water Quality BMP Manual. BMPs such as silt fencing or fiber rolls will be installed where necessary (e.g., in high-velocity flow areas and in areas of steep slope), and soil will be placed and compacted in a manner that sufficiently controls erosion and sediment discharge from the site.
APM-GEN-02	Where distribution and power lines are removed, the old conductor will be wound onto wooden spools, placed on flatbed trucks, and recycled at an approved facility.
APM-GEN-03	Old poles, associated hardware, and any other debris generated from construction activities will be removed from the site and placed on flatbed trucks for recycling or disposal at an approved facility.
APM-GEN-04	The entire existing wooden pole will be removed unless protection of an environmental resource requires the pole to be cut off at the surface and the base left in place.
APM-GEN-05	Imported material may be used to backfill the holes as needed; however, as much native material as possible will be used on site. Construction activities that involve placement of native, clean soil will be managed by employing BMPs that minimize soil erosion and impacts on surrounding vegetation per the SDG&E Water Quality BMP Manual. BMPs such as silt fencing or fiber rolls will be installed where necessary (e.g., in high-velocity flow areas and in areas of steep slope), and soil will be placed and compacted in a manner that sufficiently controls erosion and sediment discharge from the site.
APM-GEN-06	Prior to initiating construction, SDG&E will make all the appropriate and necessary notifications, including landowner notifications.
APM-GEN-07	SDG&E will notify the Underground Service Alert a minimum of 48 hours in advance of excavating or conducting other ground-disturbing activities in order to identify buried utilities. Exploratory excavations (potholing) will also be conducted to verify the locations of existing facilities in the field, if necessary.
APM-GEN-08	SDG&E will coordinate with CAISO to obtain all the necessary line clearances prior to beginning new conductor installation.

APM Number	APM Text
Air Quality	
APM-AIR-01	To the extent feasible, unnecessary construction vehicle and idling time would be minimized. The ability to limit construction vehicle idling time is dependent upon the sequence of construction activities and when and where vehicles are needed or staged. Certain vehicles, such as large diesel-powered vehicles, have extended warm-up times following start-up that limit their availability for use following start-up. Where such diesel-powered vehicles are required for repetitive construction tasks, these vehicles may require more idling time. The project would apply a “common sense” approach to vehicle use; if a vehicle is not required for use immediately or continuously for construction activities, its engine would be shut off.
APM-AIR-02	To control fugitive dust, SDG&E would apply water or non-toxic soil stabilizers on all unpaved access roads, staging areas, and other work areas if construction activity causes persistent visible emissions of fugitive dust beyond the work area; cover loads in haul trucks or maintain at least six inches of free-board when traveling on public roads; and apply non-toxic soil stabilizers or water to form and maintain a crust on inactive construction areas (disturbed work areas that are unused for four consecutive days).
APM-AIR-03	Traffic speeds on unpaved roads would be limited to 15 miles per hour.
APM-AIR-04	SDG&E would maintain construction equipment per manufacturing specifications and use low-emission equipment as follows: all off-road and portable construction diesel engines not registered under the CARB Statewide Portable Equipment Registration Program, which have a rating of 50 horsepower (hp) or more, shall meet, at a minimum, the Tier 2 California Emission Standards for Off-Road Compression-Ignition Engines as specified in California Code of Regulations, Title 13, Section 2423(b)(1), unless such an engine is not available for a particular item of equipment. In the event that a Tier 2 engine is not available for any off-road engine larger than 100 hp, that engine shall be equipped with a catalyzed diesel particulate filter (soot filter), unless the engine manufacturer indicates that the use of such devices is not practical for that particular engine type.
APM-AIR-05	SDG&E would continue to utilize best management practices (BMPs) to minimize dust and erosion.
Biological Resources	
APM-BIO-01	SDG&E will consult with the appropriate resource agencies regarding potential impacts to federally and state-listed species, as appropriate.
APM-BIO-02	All work areas will be surveyed for special-status plant and wildlife species by a qualified biologist prior to the commencement of construction in accordance with SDG&E's pre-activity survey report requirements.
APM-BIO-03	SDG&E will implement the protocols identified in Appendix A: SDG&E NCCP Protocols.
APM-BIO-04	SDG&E will implement the protocols identified in SDG&E Quino Checkerspot Butterfly (<i>Euphydryas editha quino</i>) Low-Effect Habitat Conservation Plan Sections 3.2 Actions to Minimize Impacts and 3.3 Actions to Mitigate Impacts.

APM Number	APM Text
APM-BIO-05	Stringing site locations are designed with a preference toward placement within roadways, where possible, to minimize additional potential impacts from grading and vegetation removal that may otherwise be required if these stringing sites were required to be located in vegetated, off-road areas.
APM-BIO-06	Although Laguna Mountains Skipper is not covered under SDG&E's Natural Community Conservation Plan (NCCP), SDG&E will utilize NCCP protocols 1, 2, 3, 5, 7, 8, 10, 11, 13, 14, 17, 24, 25, 29, 34, 35, 41, 44, 48, 54, 55, and 57 in United States (U.S.) Forest Service- (USFS-) modeled critical habitat and occupied habitat to minimize any potential impacts to this species. In addition, SDG&E will have a qualified biologist survey any Laguna Mountains Skipper habitat prior to work.
APM-BIO-07	If California spotted owls are identified in the vicinity of proposed work areas during the pre-activity survey process, SDG&E will consult with the appropriate resource agencies to avoid impacts to nesting California spotted owl.
APM-BIO-08	SDG&E will design and install all new poles to conform to the guidelines in the Suggested Practices for Avian Protection on Power Lines Manual developed by the Avian Power Line Interaction Committee.
APM-BIO-09	If active bat roosts are identified during pre-activity surveys, SDG&E will coordinate with the U.S. Fish and Wildlife Service/California Department of Fish and Game as appropriate.
APM-BIO-10	SDG&E will eliminate existing access roads that will no longer be used due to removal or relocation of facilities, and will return the land to near pre-construction conditions.
Cultural Resources	
APM-CUL-01	Prior to construction, all SDG&E, contractor, and subcontractor personnel will receive training regarding the appropriate work practices necessary to effectively implement the APMs and to comply with the applicable environmental laws and regulations, including the potential for exposing subsurface cultural, archaeological, and paleontological resources and how to recognize possible buried resources. This training will include a presentation of the procedures to be followed upon discovery or suspected discovery of cultural and archaeological materials, including Native American remains and their treatment, as well as of paleontological resources.
APM-CUL-02	Intensive pedestrian surveys will be conducted prior to construction in those areas within the ROWs for which initial survey access was not granted to determine the potential for impacts to cultural resources in these areas. Where possible, engineering design will be re-evaluated to determine whether facilities can be relocated to avoid any cultural resources identified from these additional surveys. If relocation is not feasible, APM-CUL-03 will be implemented to minimize impacts to sensitive cultural resources.

APM Number	APM Text
APM-CUL-03	<p>All potentially National Register-eligible or archaeologically sensitive sites, as defined in the Cultural Resources Technical Report, that will not be directly affected by construction but are within 50 feet of replacement pole locations will be designated as Environmentally Sensitive Areas (ESAs). Potentially eligible resources include those that are recommended eligible, as well as unevaluated sites. Protective fencing or other markers will be erected and maintained to protect these ESAs from inadvertent trespass for the duration of construction in the vicinity. ESAs will not be signed or marked as cultural, historical, or archaeological resources.</p>
APM-CUL-04	<p>An archaeological or cultural monitor will be present during construction activities that occur within or adjacent to identified archaeological or cultural resource site boundaries, respectively, as identified in the Cultural Resources Technical Report to ensure conformance with prescribed avoidance measures. The monitor will identify potential archaeological or cultural resources that may be unexpectedly encountered during construction and will have the authority to divert or temporarily halt construction activities in the area of discovery. In the event that archaeological or cultural resources are discovered, the monitor will stop work and notify the Principal Investigator (PI), who will inform SDG&E and the USFS Heritage Program Manager (HPM) of the stoppage. The archaeologist, in consultation with the USFS HPM and SDG&E's Cultural Resource Specialist, will determine the significance of the discovered resources. The USFS HPM and SDG&E's Cultural Resource Specialist and Environmental Project Manager must concur with the evaluation procedures to be performed before construction activities are allowed to resume. For significant cultural resources, preservation in-place will be the preferred manner of mitigating for impacts. For resources that cannot be preserved in place, a Research Design and Data Recovery Program will be prepared and carried out to mitigate impacts in consultation with the USFS HPM, the Tribes, and the State Historic Preservation Office (SHPO). No collection of archaeological or cultural resources will occur on USFS property without prior USFS HPM consent. Daily logs will be kept by all monitors, and a monitoring report (with appropriate graphics), which describes the results, analyses, and conclusions of the monitoring program, will be prepared at the conclusion of each phase of monitoring. Any new cultural sites or features encountered will be recorded with the South Coastal Information Center. Monitors will also identify and delineate an approved footpath through the archaeological and cultural resource sites for construction crews, as needed.</p>

APM Number	APM Text
APM-CUL-05	SDG&E will implement all applicable site-specific impact avoidance measures identified and described in the Cultural Resources Technical Report, such as avoiding access road improvements within culturally sensitive areas unless improvements are required for safety reasons; replacing poles within the previously disturbed area (two to four feet) represented by the existing pole locations, where necessary, to avoid sensitive resources; and cutting existing poles off at grade level, where specified and landowner approval is provided. Same-hole pole placement will also be utilized on a case-by-case basis. No new pole locations will be placed within cultural resource boundaries unless the appropriate consultation (including Section 106) has taken place. No temporary poles will be located within sites unless the appropriate consultation (including Section 106) has taken place.
APM-CUL-06	In consultation with the USFS HPM, the Tribes, and the SHPO, SDG&E will develop a Cultural Resources Treatment Plan that includes procedures for protection and avoidance, evaluation and treatment, and the curation of any potentially register-eligible cultural materials. Specific protective measures, including a monitoring program, will be defined in the Cultural Resources Treatment Plan to reduce potential adverse impacts on unknown cultural resources to less-than-significant levels.
APM-CUL-07	Should any previously unidentified prehistoric or historic artifacts; indicators or examples of cultural, archaeological, or paleontological resources; or potential human remains or funerary items be discovered during the course of site preparation, grading, excavation, construction, or other activities, all operations within 50 feet of an inadvertent discovery during such activities shall cease and the PI will contact the USFS HPM and SDG&E's Cultural Resource Specialist. Once a find has been identified, the USFS HPM and SDG&E's Cultural Resources Specialist will determine if additional cultural resources work, including but not limited to a formal evaluation or Proposed Action redesign, are required treatment. Ground-disturbing work in the vicinity of the discovery will not resume without authorization by the USFS HPM and after the appropriate consultation has taken place.
APM-CUL-08	A paleontological monitor will be present for excavation activities conducted at locations with underlying PFYC Class 3 geologic deposits where new steel poles are unable to be installed in the same location as of that of the existing wood pole. In the event that fossils are unexpectedly encountered during construction, a qualified paleontologist will have the authority to divert or temporarily halt construction activities in the area of discovery to allow the recovery of fossil remains in a timely fashion. When significant fossils are discovered, the paleontologist will recover them in accordance with professional standards. Fossil remains collected during monitoring and salvage will be cleaned, repaired, sorted, cataloged, and curated in a scientific institution with permanent paleontological collections. The paleontological monitor will follow the procedures outlined in the Paleontological Monitoring and Treatment Plan, which will be prepared and will include information regarding pre-construction field surveys, construction personnel training, necessary permits, research design, monitoring methodology, fossil discovery and recovery protocols, fossil preparation and curation procedures, and the preparation of a final monitoring report.

APM Number	APM Text
APM-CUL-09	SDG&E will flag potentially sensitive archaeological resources identified in the vicinity of access roads for avoidance and prohibit any grading activities in the vicinity as part of construction or operation and maintenance.
Fire Hazards	
APM-HAZ-01	SDG&E will implement its existing Electric Standard Practice (ESP) 113-1, which includes requirements for carrying emergency fire suppression equipment, conducting worker-awareness trainings that cover fire prevention and safety, restrictions on smoking and idling vehicles, and construction restrictions during Red Flag Warnings (RFWs).
APM-HAZ-02	SDG&E will implement Electric Distribution Operation 3017 to ensure that the proper steps are taken to maintain fire safety while meeting all operational and service requirements.
APM-HAZ-03	Prior to starting construction activities, SDG&E will clear dead and decaying vegetation from Proposed Action work areas where personnel are active or where equipment is in use or being stored within ROWs, staging areas, stringing sites, and access roads.
APM-HAZ-04	Prescribed fire tools and backpack pumps with water will be kept within 50 feet of work activities to ensure the capability for rapid extinguishment in the event of a fire.
APM-HAZ-05	Weather and fire danger will be monitored daily by SDG&E meteorologists and wildland fire specialists in order to provide timely and immediate communication of significant changes which could impact the Proposed Action.
APM-HAZ-06	No construction work will occur for areas affected by a RFW or Project Activity Level E designation.
Hydrology	
APM-HYD-01	All concrete washouts will be conducted either into excavations where the concrete was poured within designated concrete washout stations, or will be captured using a washout recycling system. Crews will not be allowed to dispose of concrete directly onto the ground.
APM-HYD-02	When construction activities are required adjacent to flowing aquatic resources, sediment barriers will be placed between the work area and flowing water.
APM-HYD-03	<p>In areas where topsoil has not been salvaged, construction activities will be limited when the environmental monitor determines that the soil is too wet to adequately support vehicles and equipment. Where soil conditions are deemed too wet to work, one of the following measures will apply:</p> <ul style="list-style-type: none"> - Access will be limited to the minimum area feasible for construction. Where possible, vehicles and equipment will be routed around wet areas so long as the re-route does not cross into sensitive resource areas. - If wet areas cannot be avoided and soil moisture is too high to strip topsoil, BMPs—including the use of wide-track or low ground pressure equipment or installation of prefabricated equipment pads or timber mats—will be implemented for use in these areas to minimize rutting and off-site sedimentation.

APM Number	APM Text
APM-HYD-04	Any areas not surveyed for potentially jurisdictional wetlands or waters due to limited access will be surveyed prior to the start of construction activities and potential impacts will be assessed and the appropriate jurisdictional permits will be obtained as needed.
APM-HYD-05	SDG&E will prepare and implement a Storm Water Pollution Prevention Plan (SWPPP). The SWPPP will identify BMPs based on its Water Quality BMPs Manual for each activity that has the potential to degrade surrounding water quality through erosion, sediment run-off, and other pollutants. These BMPs will then be implemented and monitored by a Qualified SWPPP Practitioner.
APM-HYD-06	During any construction activities, SDG&E will flag all hydrological resources occurring within work areas for avoidance, and all construction activities will occur outside of these resources.
APM-HYD-07	SDG&E will comply with USFS requirements pertaining to hydrology and water quality, as detailed in the USFS's Water Quality Management for National Forest System Lands in California, BMPs.
APM-HYD-08	If dewatering is required, dewatering systems—as outlined in SDG&E's Water Quality BMPs Manual—will be used to dispose of groundwater. Typically, groundwater will be pumped into truck-mounted storage tanks and either discharged to land in accordance with Regional Water Quality Control Board regulations or transported to an authorized discharge location.
APM-HYD-09	SDG&E will implement site-specific erosion and sediment control devices and the proper handling of potentially hazardous materials.
APM-HYD-10	Following construction, the ROW, work areas, stringing sites, staging areas, and fly yards will be returned to near pre-construction conditions, which include re-establishing drainage patterns and vegetation, where feasible.
APM-HYD-11	Existing access roads will be utilized to access the replacement structures where helicopter-only access is not required.
Noise	
APM-NOI-01	SDG&E will provide notice of the construction schedule to all property owners within 300 feet of the Proposed Action by mail at least one week prior to the start of construction activities. The announcement will state the construction start date, anticipated completion date, and hours of operation, as well as a telephone number to call with questions or complaints during construction.
APM-NOI-02	Operating equipment will be positioned to maximize the distance to residences and to maintain safe and effective operation.
APM-NOI-03	All internal combustion engine-driven equipment will be equipped with exhaust mufflers that are in good condition and meet or exceed the manufacturer's specifications. All equipment will be maintained and tuned according to manufacturer recommendations.
APM-NOI-04	When backup alarms have more than one loudness setting, they will be set to the lowest setting that meets Occupational Safety and Health Administration safety requirements.

APM Number	APM Text
APM-NOI-05	When located within 80 feet of residences, a temporary noise barrier with an effective height of approximately three feet will be placed between residences and stationary noise-generating equipment during use. The effective height is that of the barrier above the line-of-sight between the noise source and the noise-sensitive receiver.
APM-NOI-06	Helicopters will be required to maintain a height of at least 500 feet when passing over residential areas, except when at temporary construction areas or actively assisting with conductor stringing. All helicopters will be required to maintain a lateral distance of at least 500 feet from all schools. No more than 64 flights per day will be conducted.
APM-NOI-07	Residents who experience construction noise levels that exceed the applicable noise thresholds will be temporarily relocated, on an as-needed basis, for the duration of the activities that will impact them.
APM-NOI-08	In the event that blasting is required within 325 feet of a residential property line, SDG&E will prepare and provide a blasting plan for the Proposed Projects that is consistent with SDG&E's blasting guidelines to reduce noise and vibration impacts from blasting activities. The blasting contractor will be required to obtain a blasting permit and explosive permit per the San Diego County Regulatory Ordinances.
APM-NOI-09	Where appropriate, SDG&E will coordinate with the San Diego County noise control officer regarding helicopter flights between 6:30 a.m. and 7:00 a.m. to avoid any conflicts with the County noise ordinance.
APM-NOI-10	If construction occurs outside the hours allowed by San Diego County, SDG&E will follow its established protocols and will provide advance notice by mail to all property owners within 300 feet of planned construction activities. The announcement will state the construction start date, anticipated completion date, and hours of construction.
Transportation and Traffic	
APM-TRANS-01	To minimize traffic impacts, temporary lane closures will occur during off-peak traffic hours, to the extent practical, in order to minimize disruptions and traffic backups.
APM-TRANS-02	Caution signs and/or flagmen will be used to regulate traffic where necessary and to maintain a safe transportation corridor during construction.
APM-TRANS-03	Emergency vehicles will be provided access even in the event of temporary road or lane closures.
APM-TRANS-04	SDG&E will coordinate isolated, temporary road closures with local jurisdictional agencies, as required, to cross these roadways, and perform work according to agency requirements.
APM-TRANS-05	SDG&E will develop and implement a Traffic Control Plan during construction.
APM-TRANS-06	SDG&E will coordinate flight patterns with local air traffic control and the Federal Aviation Administration prior to construction to prevent any adverse impacts due to increased air traffic.

APM Number	APM Text
APM-TRANS-07	Where replacement poles will be close to existing pole locations, existing access roads, spur roads, and turnarounds will be used to the extent possible to support construction activities and will continue to be used for future line maintenance.
Visual Resources	
APM-VIS-01	When construction has been completed, all temporary work areas will be restored to near pre-construction conditions in accordance with landowner agreements, in order to reduce potential visual contrast with the surrounding landscape setting.
APM-VIS-02	Construction activities will be kept as clean and inconspicuous as practical. Where practical, construction storage and staging will be screened from close-range residential views with opaque fencing.
APM-VIS-03	Non-specular conductors will be installed for new and replacement conductors along the electric line alignments in order to minimize the reflectivity and general visibility of new electric line facilities.
APM-VIS-04	New and replacement poles to be installed along the electric line alignments will be reddish-brown, weathered-steel that will appear similar in color to existing wood poles seen in the Proposed Action area and will blend in with the surrounding landscape backdrop.
APM-VIS-05	Any required lighting will be limited to individual pole work areas and will not exceed more than two hours per evening.